

COMPUTER-ASSISTED DRAFTING

A student who has completed the Job Corps Computer-assisted Drafting program is equipped with the skills to contribute to the workplace as a valued employee from day one. Competence in academic and vocational skills is required for graduation. In addition, Job Corps students learn employability and technological skills. To complete his or her Computer-assisted Drafting training, a student must master skills in these categories:

SAFETY

Explain the need for fire escape routes, evacuation procedures and fire extinguishers in the work area; demonstrate safety precautions on the job.

PRINT ROOM PROCEDURES

Explain general reproduction processes; describe the level of quality required for photographic reproduction of prints.

DRAFTING/OFFICE EQUIPMENT

Demonstrate proper cleaning and storage of Board; demonstrate proper use of drafting tools and tables; demonstrate proper use and maintenance of all drafting and office equipment.

GENERAL COMPUTER SKILLS

Demonstrate proper computer startup and shutdown; demonstrate knowledge of hardware and software specification; demonstrate correct file management and DOS file manipulation; demonstrate ability to use AutoCAD to produce production drawings; demonstrate ability to correctly connect computer to peripherals.

GENERAL DRAFTING

Follow instruction furnished in oral, sketch or written form; demonstrate proper setup practices for Board and CAD; demonstrate ability to use reference library to obtain technical data and procedures; demonstrate proper letter techniques for Board and font management techniques for CAD; demonstrate quality line symbology and weight (Board and CAD); demonstrate use of drafting tools (Board and CAD); use fractional, decimal, architectural and civil engineering scales (Board and CAD); demonstrate use of correct geometric techniques (Board and CAD); demonstrate proper free-hand sketching using pen and pencil techniques; demonstrate use of correct orthographic projection techniques (Board and CAD); demonstrate use of correct sectioning techniques (Board and CAD); demonstrate use of correct axonometric projection and auxiliary view techniques (Board and CAD); demonstrate use of flat patterning for standard geometric shapes (Board and CAD); demonstrate ability to select appropriate drafting media; demonstrate proper view selection and presentation (Board and CAD); demonstrate ability to meet production work schedules and deadlines.

ILLUSTRATION SKILLS

Demonstrate photographic techniques of enlargement and reduction; demonstrate proper cut and paste techniques; demonstrate ability to use pressure-sensitive graphic products; scan two-dimensional art into computer and show ability to manipulate; produce camera-ready artwork via the computer; produce exploded-view pictorial drawings; produce one- and two-point perspective drawings (Board and CAD); demonstrate proper shading techniques.

UPON COMPLETION OF THE FOUNDATION COURSES OUTLINED HERE, STUDENTS MAY SPECIALIZE IN THE FOLLOWING AREAS:

Mechanical Drafter

Civil Drafter

Architectural Drafter

Technical Illustrator

AVAILABILITY OF SPECIALIZATIONS VARIES AMONG CENTERS.